

ABSTRACT

An AM neighboring interference removing method and circuit is provided which can select only a desired AM modulation wave even if an interference AM modulation wave is partially superposed upon the desired AM modulation wave. An AM modulation wave desired to be received is multiplied at multipliers by local oscillation signals having frequencies $3f_c/2$ and $f_c/2$ where f_c is the carrier frequency of a neighboring interference AM modulation wave. High frequency components contained in the outputs of the multipliers are removed by low-pass filters. Of the outputs of the low-pass filters, the carrier frequency of the neighboring interference wave is $f_c/2$ and the AM carrier frequencies of the AM stereo modulation wave are $(f_c/2 + f_a)$ and $(f_c/2 - f_a)$, where f_a is a difference frequency between the AM carrier frequency of the AM stereo modulation wave and the carrier frequency of the neighboring interference wave. A subtractor subtracts the output of one of the low-pass filter from the output of the other to thereby cancel out the neighboring interference wave. This subtraction signal is passed through a low-pass filter having a cut-off frequency of $f_c/2$ to derive only the AM stereo modulation wave.